MIDMARK® Installation Instructions

9A259001 Printer Kit Installation For Sterilizers

KIT COMPONENTS

Part Number	Description	Qty.
9A259001	Printer Kit	1
003-1194-00	Installation Instructions	1

REQUIRED TOOLS

Flat Blade Screwdriver
Phillips Screwdriver

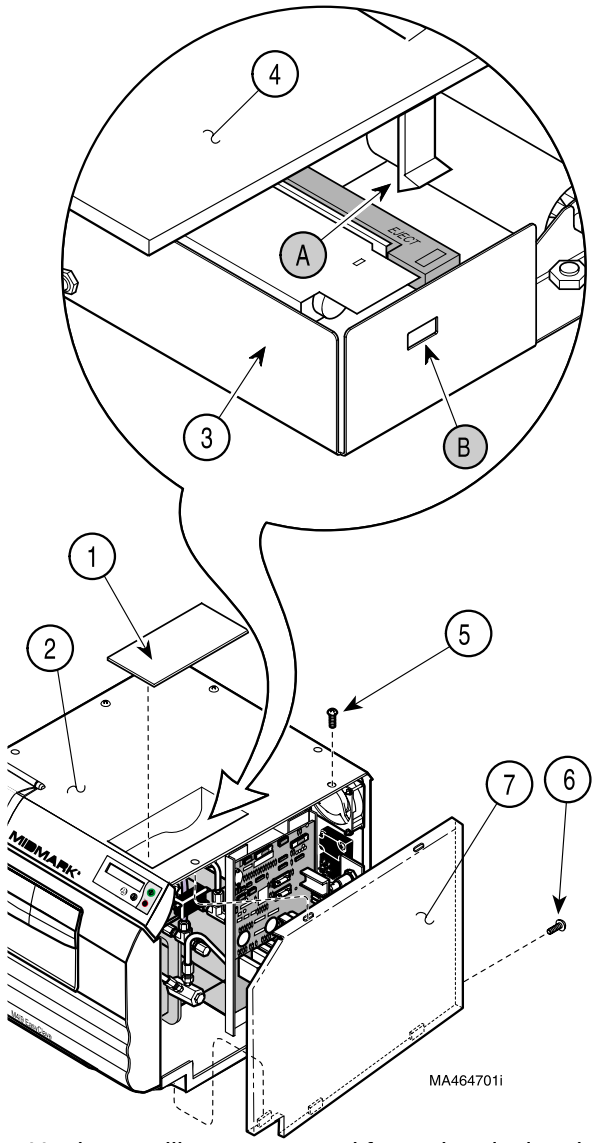
IMPORTANT INSTRUCTIONS

Provides a means to add a printer to the Sterilizer in order to print out pertinent data during the sterilization process.

WARNING

Always disconnect power cord from outlet receptacle before removing any sterilizer covers/panels or making any repairs to prevent possibility of electrical shock and allow unit to cool. Failure to comply could result in personal injury.

INSTALLATION (1)



1. Unplug sterilizer power cord from electrical outlet.
2. Using a flat bladed screwdriver (use care not to mar top surface of top cover), carefully pry existing printer cover plate (1) from top cover (2) and discard (cover plate is held in place with double sided tape).
3. If not already assembled, attach printer assembly (3) to printer housing (4) by inserting two locking tabs (A) into locking slots (B). Set printer assembly aside.
4. Remove two screws (5) and one screw (6) securing right hand side panel (7).
5. Pull outward and down on top edge of right hand side panel (7) and remove right hand side panel from sterilizer.

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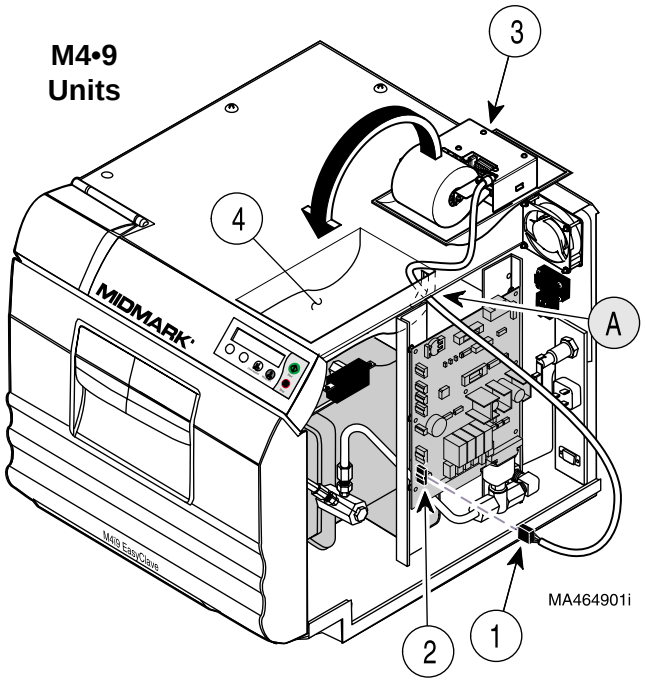
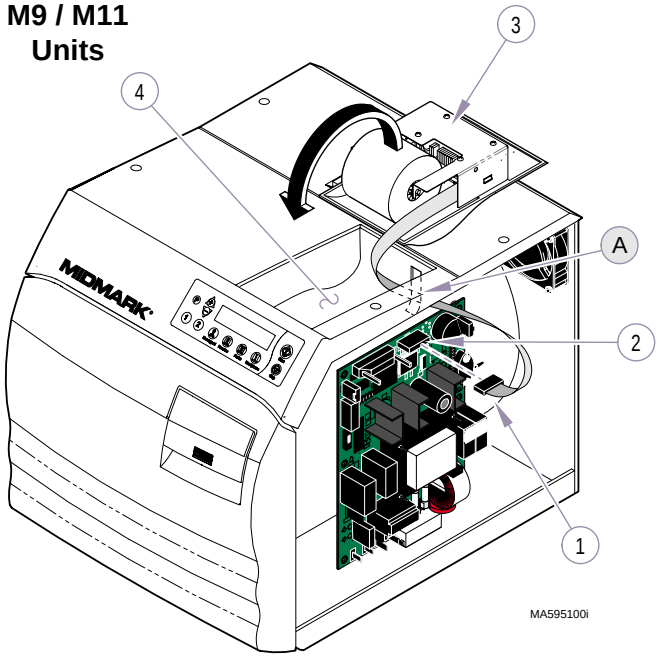
INSTALLATION (2)

M4•9 Units

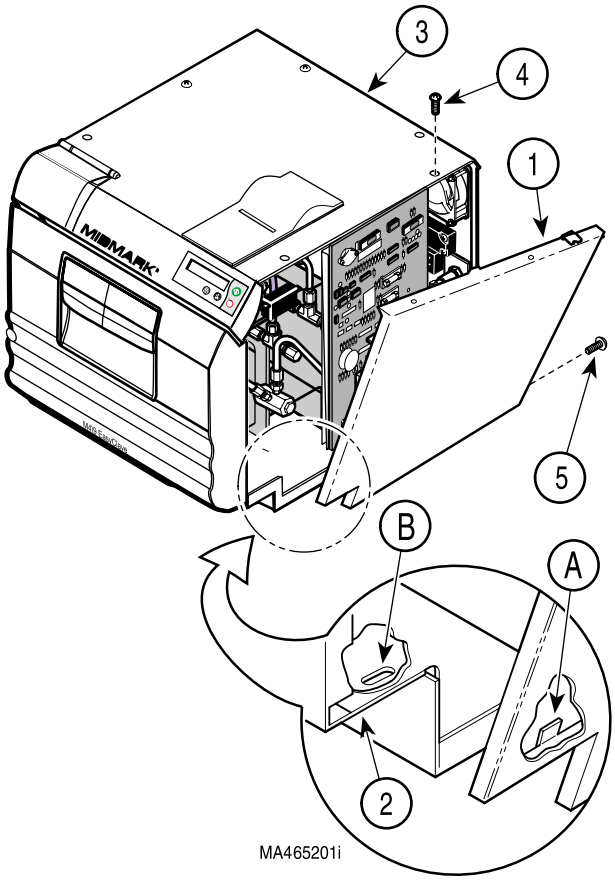


M9 / M11 Units



6. Route loose end of PCB printer harness (1) through slot (A) in printer cavity (4) of top cover.
7. Plug PCB printer harness (1) into printer terminal (2) of PC Board.
8. Position printer assembly (3) in printer cavity (4).

INSTALLATION (3)



9. Insert three tabs (A, Figure 3) of right hand side panel (1) into three slots (B) of base (2).
10. Raise top edge of right hand side panel (1) into position under top cover (3) and secure using two screws (4) and one screw (5). Make sure back lip of right hand side panel is on outside of back panel; not on inside.
11. Plug sterilizer power cord into electrical outlet.
12. Insert a paper roll if necessary (see Inserting Paper Roll later in these instructions).

OPERATION (1) - OPERATING THE PRINTER

When the sterilizer is plugged in, the printer is automatically powered up and initialized; no user intervention / setup is required.

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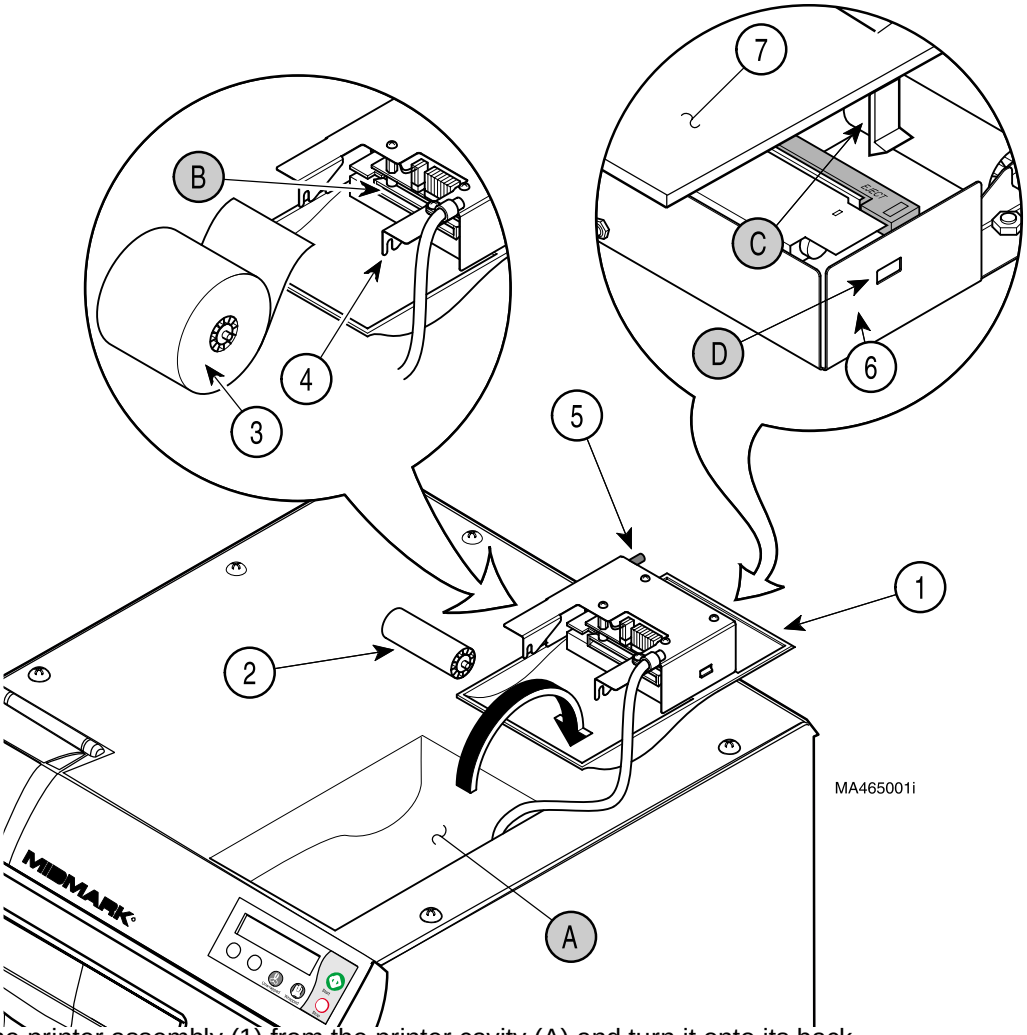
OPERATION (2) - INSERTING THE PAPER ROLL



1. Remove the printer assembly (1) from the printer cavity (A) and turn it onto its back.
2. Remove paper spindle (2) from used paper roll and insert it in new paper roll (3).
3. Unroll 2 to 3 in.(5 to 7.5 cm) of paper (3).
4. Cut a straight edge on the paper (3) if it is torn or jagged; this will facilitate the entry of paper into the printer.
5. Slide the paper (3) into the slot (B) on the back of the printer; it will slide in 1/4 in. (6.4 mm) before it stops.

NOTE

If paper (3) does not feed out of top of printer by itself, remove printer assembly (6) from printer housing (7) by pulling two locking tabs (C) from locking slots (D). Feed paper through paper slot in printer housing (7) by hand and then re-attach printer assembly (6) to printer housing (7) by inserting two locking tabs (C) into locking slots (D).

6. While holding the paper (3) in place, press the PAPER FEED button (5) and hold. The printer will activate and a rubber roller will pull the paper into the printer compartment. Continue to hold the PAPER FEED button down until the paper emerges from the top of the printer mechanism. Then, when 1 in. (2.5 cm) of paper has emerged from the top of the printer, release the PAPER FEED button.
7. Pull the paper (3) through the printer until 2 to 3 in. (5 to 7.5 cm) of paper is exposed.
8. Install the paper roll (3) by inserting the ends of the paper spindle (2) in slots of spindle holders (4).
9. Turn the paper roll so as to take up the slack in the paper feeding to the printer. Make sure the roll of paper turns freely. If it does not turn freely, the paper will jam and possibly damage the printer mechanism.
10. Install the printer assembly (1) back into the printer cavity (A).

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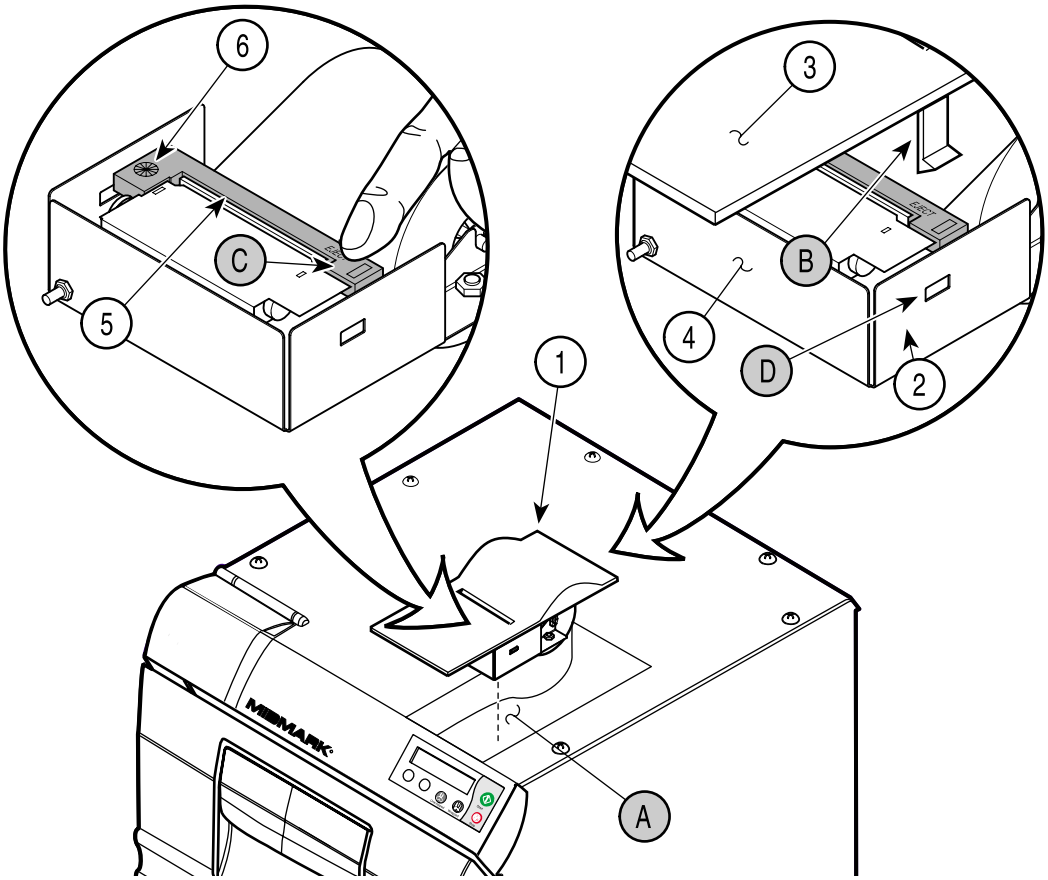
OPERATION (3) - ABOUT THE CARTRIDGE RIBBON

The printer takes a cartridge ribbon. If the printed material is difficult to read and you suspect a dried out ribbon is the cause of the problem, advance to a properly inked portion of the ribbon by pressing the PAPER FEED button for three seconds. When printing becomes faint or difficult to see and pressing the PAPER FEED button for three seconds does not correct the problem, you should replace the cartridge (see Installing a New Cartridge Ribbon later in this manual).

OPERATION (4) - INSTALLING A NEW CARTRIDGE RIBBON



1. Unplug the sterilizer power cord from electrical outlet.
2. Remove the printer assembly (1) from the printer cavity (A).
3. Slightly bend sides of housing (2) outward until housing can be pulled off of locking tabs (B). Remove printer housing (3) from printer assembly (4).
4. Push down on the right side (C) of the ribbon cartridge (5) (marked PUSH) and remove the old ribbon cartridge.
5. Install the new ribbon cartridge (5). Be sure the ribbon is inserted in front of the paper and the ribbon is flat against the paper. Press the ribbon cartridge (5) downward until it snaps into place.
6. Turn the knob (6) on the ribbon cartridge (marked by an arrow) clockwise to stretch the ribbon so it is tight.
7. Re-attach printer assembly (4) to printer housing (3) by inserting two locking tabs (B) into locking slots (D).
8. Position printer assembly (1) in printer cavity (A).
9. Plug sterilizer power cord into electrical outlet.

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OPERATION (5) - REMOVING THE PAPER ROLL

EQUIPMENT ALERT

Be sure to pull the paper out of the top of the printer. Pulling the paper out of the back of the printer will damage the printer mechanism.

Before removing the paper roll, advance the paper about 1 in. (2.5 cm) by pressing down and holding the PAPER FEED button. Lift the paper roll away from the printer housing, and with a scissors, cut the paper roll feeding to the printer. Try to make the cut as straight as possible to facilitate the next reloading of the paper. Now, pull the remaining paper through the printer mechanism.

OPERATION (6) - POWER UP MESSAGE

When the printer successfully initializes after the sterilizer is powered up, it prints the word READY to assure the operator that its built in microprocessor is working properly and the sterilization cycles will be recorded by the printer.

OPERATION (7) - PRINTER TAPE DESCRIPTION

The printer will print the following information for each program cycle:

Cycle Type

Set Temperature

Set Time

Run Number

Date: Lines are printed for the month, day, and year so that the date can be recorded on the printer tape.

The printer will print the chamber temperature, the chamber pressure, and the time elapsed in two (2) minute increments during the heat up phase.

During the actual Sterilization Phase of the program cycle, the printer will record the chamber temperature, chamber pressure, and the time elapsed for each 1/2 minute of the program cycle.

When the sterilizer has completed the Sterilization Phase of the program cycle, the printer will print the word VENTING CHAMBER to show that the steam pressure is being exhausted from the chamber.

When the sterilizer has completed the Drying Phase of the program cycle, the word COMPLETE will be printed to show that the sterilizer has completed the sterilization program cycle.

TYPICAL PRINTOUT OF A PROGRAM CYCLE

The sample printouts show an example of typical printouts of a program cycles on the M4•9 & M9 / M11:

Typical Printout of a Program Cycle for M4•9 Sterilizer

```
BEGIN

UNWRAPPED
270  degF  3:30 MINUTES

MM-DD-YYYY
_ _ - _ _ - _ _ _ _
TOTAL CYCLES    123

HEATING-UNWRAPPED

MM:SS     degF      PSI
0:00      224       0.0
2:00      236       10.8


STERILIZING
3:30      271       28.2
3:00      273       29.1
2:30      273       29.0


MIN TEMP          271
MAX TEMP          274
MIN PRESS         28.2
MAX PRESS         29.5

VENTING CHAMBER

DRYING
20:00
15:00
10:00
5:00
0:00

TOTAL PROCESS TIME
  0:20:56
COMPLETE
```

Write in month, day, and year.

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Typical Printout of a Program Cycle for M9 / M11 Sterilizers

BEGIN

UNWRAPPED
270 degF 3:00 MINUTES

MM - DD - YYYY
_ _ - _ _ - _ _ _ _ **Write in month, day, and year.**
TOTAL CYCLES 123

HEATING-UNWRAPPED

MM:SS	degF	PSI
0:00	224	0.0
2:00	236	10.8

STERILIZING

3:00	271	28.2
2:30	273	29.1
2:00	273	29.0

MIN TEMP	271
MAX TEMP	274
MIN PRESS	28.2
MAX PRESS	29.5

VENTING CHAMBER

DRYING
30:00
15:00
10:00
5:00
0:00

TOTAL PROCESS TIME
0:20:26
COMPLETE

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